



Backup Power: Gas vs. Solar

Gas Generator

\$cheap (+ gas)

PROs

—cheapest solution

CONs

- requires you store gas on your property (NOT enclosed area)
- gas can explode in a brushfire
- inexperience with gas generators can lead to accidents (like in the dark during a Blackout)
- cannot be used indoors (fumes), so may need long extension cords going through windows
- unfriendly to the environment
- noisy

Propane Generator

\$5,000 - \$10,000 (+ propane)

PROs

—most of us already have a propane tank, so no storage or maintenance issues

CONs

- requires you store gas on your property (NOT in an enclosed area)
- gas can explode in a brushfire
- inexperience with gas generators can lead to accidents (like in the dark during a Blackout)
- cannot be used indoors (fumes), so may need long extension cords going through windows
- unfriendly to the environment
- noisy

🕶️ Solar-Powered Lithium Ion Batteries - with/without Solar Panels

\$500 - \$5,000

PROs

- portable
- can bring them inside
- silent
- can be used for ANY electrical-powered stuff you have
- display tells you how many hours you have left
- can buy portable solar panels to keep them going infinitely in sunny weather
- good for Blackouts, but maybe NOT rainy tree-down outage days
- unlike a Tesla Powerwall, you CAN take it with you if you move
- solar energy from the sun is FREE

CONs

- they cost more than gas - unless you also add in the cost of the gas itself over time
- the high-end solution (Yeti 3000 with maximum portable solar panels) could cost \$4,000-5,000
 - making you think Heck, let's just get a Tesla Powerwall...
- only really a solution for communication backup: landlines & internet for cell phones
 - and SMALL electronics: never underestimate the power of a functioning coffee-maker
- small-medium Yetis would not be enough to keep laptops up for long
 - so your internet/cell is ALL through your cell phone (doable, but pesky)
 - you can keep your phone charged with a solar-powered battery on your windowsill

Tesla Powerwall Batteries - with/without Solar Panels

\$6,000 - \$13,000++ (after incentives - subject to change)

CONTINUOUS POWER TO ESSENTIAL HOME CIRCUITS

PROs

- continuous power to your essential home circuits - a True Joy
- does NOT require solar panels - can charge off your house outlet and be ready for an outage
- better with solar panels since then you can last indefinitely in sunny weather during a multi-day Blackout
- saves on your electric bill (not tons, but some)
- improves the re-sale value of your home
- good for the environment
- solar energy from the sun is FREE
- makes your carport look cool even though they don't have wheels

CONs

- expensive: one wall could be \$6,000-8,000 (prices are in flux); a 2nd wall is not double that, but almost
- you need to have sunny property
- permits take time & some companies put you on a waiting list
- if you don't already have solar panels, then THAT costs more too

OUR DECISION: Solar & Tesla Powerwall



To buy a Goal Zero Yeti, we bought ours online from EarthTechProducts:

<https://www.earthtechproducts.com/>

They seemed to have the best prices at the time and they have free shipping and no sales tax.



To set up your Goal Zero Yeti, (figuring out where to plug it into your communications equipment), you can contact fellow Topangan and handyman for hire:

Scott King - Technical Consultant/Yeti Whisperer

jsk1.2007@gmail.com

310-486-1248

 **To buy large solar batteries**, we had a Xero Solar rep come out and size our needs (based on our yearly power bill) and ended up with 2 Powerwalls (we already had solar panels). The delay was minimal since they had them in stock. We are very happy with it all.

Lee Rhoads - local Topangan & Solar Power Consultant

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